查询LP379PBL1-C0G-03供应商

# Cree® P4 LED
## Model # LP379PBL1-C0G-03
## Data Sheet

120-degree, 7.6 x 7.6 LED lamp in blue color with water-transparent lens and stopper

## Applications

- Advertising Signs
- Indicators
- Message Boards

## Absolute Maximum Ratings ($T_A$ = 25°C)

| Items | Symbol | Absolute Maximum Rating | Unit |
|---|---|---|---|
| Forward Current | $I_F$ | 30 | mA |
| Peak Forward Current [Note] | $I_{FP}$ | 100 | mA |
| Reverse Voltage | $V_R$ | 5 | V |
| Power Dissipation | $P_D$ | 132 | mW |
| Operation Temperature | $T_{opr}$ | -40 ~ +95 | °C |
| Storage Temperature | $T_{stg}$ | -40 ~ +100 | °C |
| Lead Soldering Temperature | $T_{sol}$ | Max. 260°C for 3 sec. max. (3 mm from the base of the epoxy bulb) | |

**Note:** Pulse width ≤0.1 msec, duty ≤1/10.

## Typical Electrical & Optical Characteristics ($T_A$ = 25°C)

| Characteristics | Symbol | Condition | Unit | Minimum | Typical | Maximum |
|---|---|---|---|---|---|---|
| Forward Voltage | $V_F$ | $I_F$ = 30 mA | V | | 3.6 | 4.4 |
| Reverse Current | $I_R$ | $V_R$ = 5 V | µA | | | 100 |
| Dominant Wavelength | $\lambda_D$ | $I_F$ = 30 mA | nm | 462 | 470 | 475 |
| Luminous Flux | $\Phi_V$ | $I_F$ = 30 mA | mlm | 400 | 800 | |
| 50% Power Angle | 2θ½ | $I_F$ = 30 mA | deg | | 120 | |



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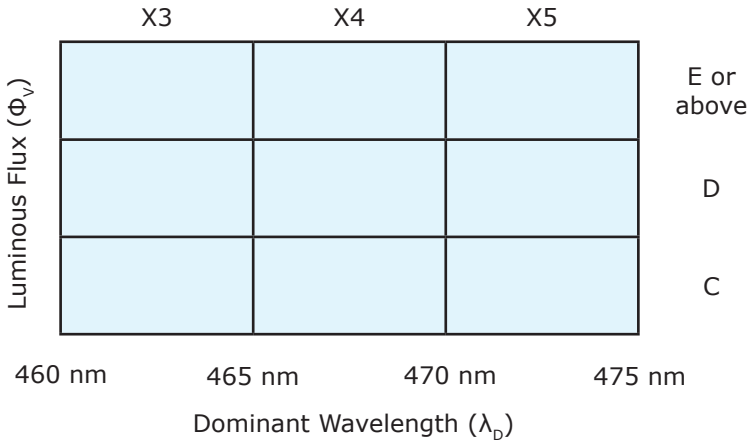
## Standard Bins for LP379PBL1-C0G-03 ($I_F$ = 30 mA)

Lamps are sorted to luminous flux ($\Phi_V$), $V_F$ and dominant wavelength ($\lambda_D$) bins shown.

Orders for LP379PBL1-60G-03 may be filled with any or all bins contained as below.

All luminous flux ($\Phi_V$), $V_F$ and dominant wavelength ($\lambda_D$) values shown and specified are at $I_F$ = 30 mA.




| Rank | C | D |
|---|---|---|
| Luminous Flux | 400-800 mlm | 600-1200 mlm |

| Rank | V7 | V8 | V9 | V10 | V11 | V12 | V13 | V14 |
|---|---|---|---|---|---|---|---|---|
| Voltage | 2.8-3.0 V | 3.0-3.2 V | 3.2-3.4 V | 3.4-3.6 V | 3.6-3.8 V | 3.8-4.0 V | 4.0-4.2 V | 4.2-4.4 V |

Important Notes:
1. All ranks will be included per delivery; rank ratio will be based on the dice distribution.
2. No tolerance in the measurement of luminous flux.
3. Tolerance of measurement of dominant wavelength is ±1 nm.
4. Tolerance of measurement of $V_F$ is ±0.05 V.
5. Packaging methods are available for selection; please refer to the "Cree LED Lamp Packaging Standard" document.
6. Please refer to the "Cree LED Lamp Reliability Test Standards" document for reliability test conditions.
7. Please refer to the "Cree LED Lamp Soldering & Handling" document for information about how to use this LED product safely.

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## Graphs

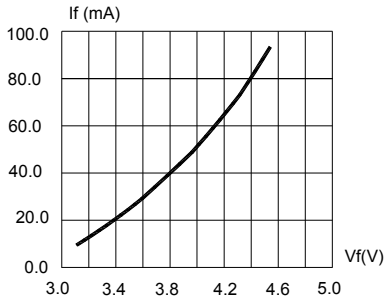


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

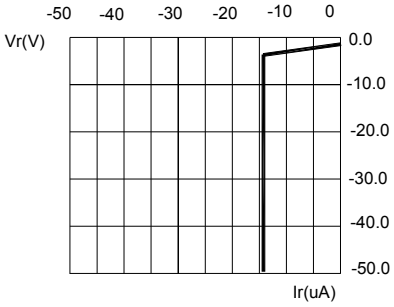


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

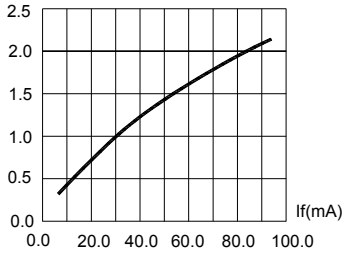


FIG.3 RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT

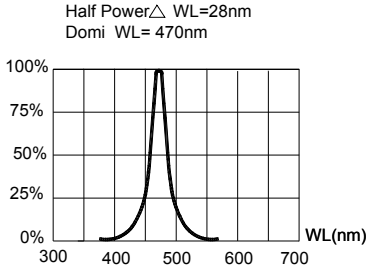


FIG.4 RELATIVE LUMINOUS FLUX VS. WAVELENGTH.

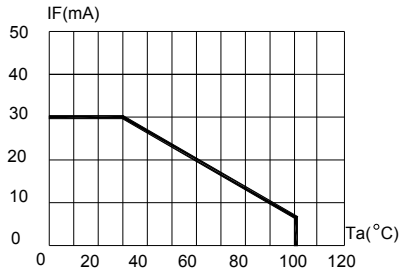


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE (Tjmax=120°C)

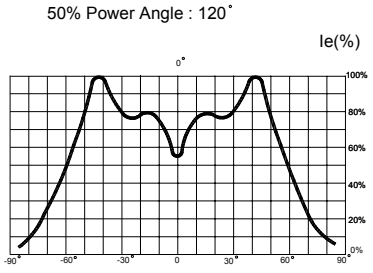


FIG.6 FAR FIELD PATTERN

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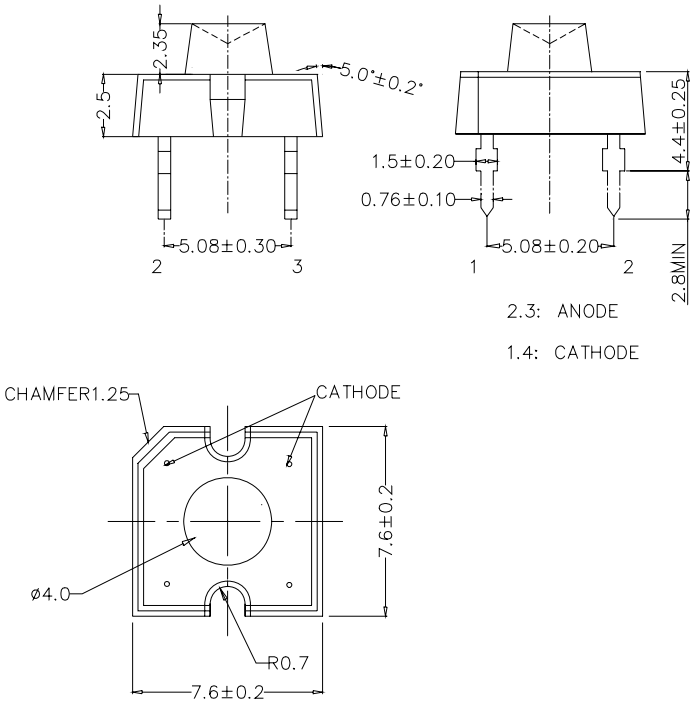
## Mechanical Dimensions

All dimensions are in mm. Tolerance is ±0.25 mm unless otherwise noted.

An epoxy meniscus may extend about 1.5 mm down the leads.

Burr around bottom of epoxy may be 0.5 mm max.




## Notes

RoHS Compliance

The levels of environmentally sensitive, persistent biologically toxic (PBT), persistent organic pollutants (POP), or otherwise restricted materials in this product are below the maximum concentration values (also referred to as the threshold limits) permitted for such substances, or are used in an exempted application, in accordance with EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), as amended through April 21, 2006.

Vision Advisory Claim

Users should be cautioned not to stare at the light of this LED product. The bright light can damage the eye.

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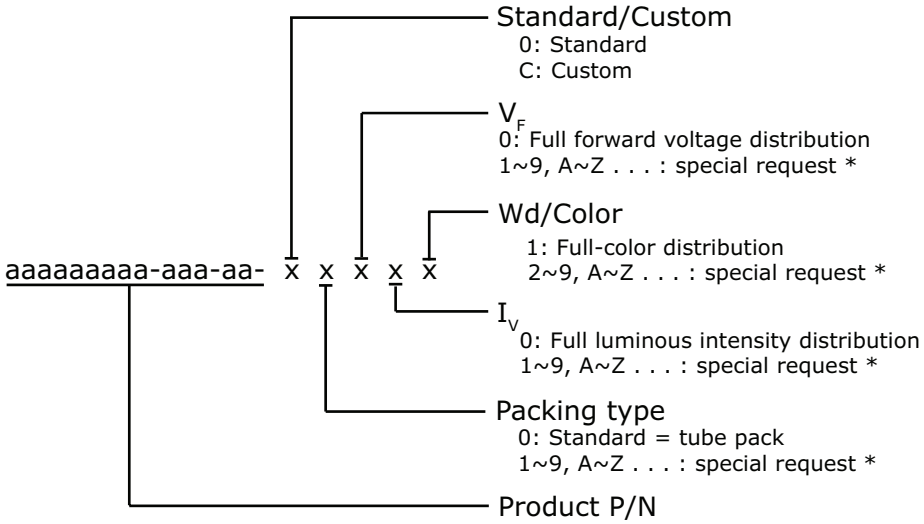
## Kit Number System

Cree LED lamps are tested and sorted into performance bins. A bin is specified by ranges of color, forward voltage, and brightness. Sorted LEDs are packaged for shipping in various convenient options. Please refer to the "Cree LED Lamp Packaging Standard" document for more information about shipping and packaging options.

Cree LEDs are sold by order codes in combinations of bins called kits. Order codes are configured in the following manner:


aaaaaaaaa-aaa-aa- x x x x x
Standard/Custom
0: Standard
C: Custom
$V_F$
0: Full forward voltage distribution
1~9, A~Z . . . : special request *
Wd/Color
1: Full-color distribution
2~9, A~Z . . . : special request *
$I_V$
0: Full luminous intensity distribution
1~9, A~Z . . . : special request *
Packing type
0: Standard = tube pack
1~9, A~Z . . . : special request *
Product P/N

* Contact your Cree sales representative for ordering information.

## Standard Available Kits*

| Kit Number | Description |
|---|---|
| LP379PBL1-C0G-03-00001 | P4 120 Blue 470nm, FULL RANK, Tube Pack |

* Please contact your Cree representative about the availability of non-standard kits.

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